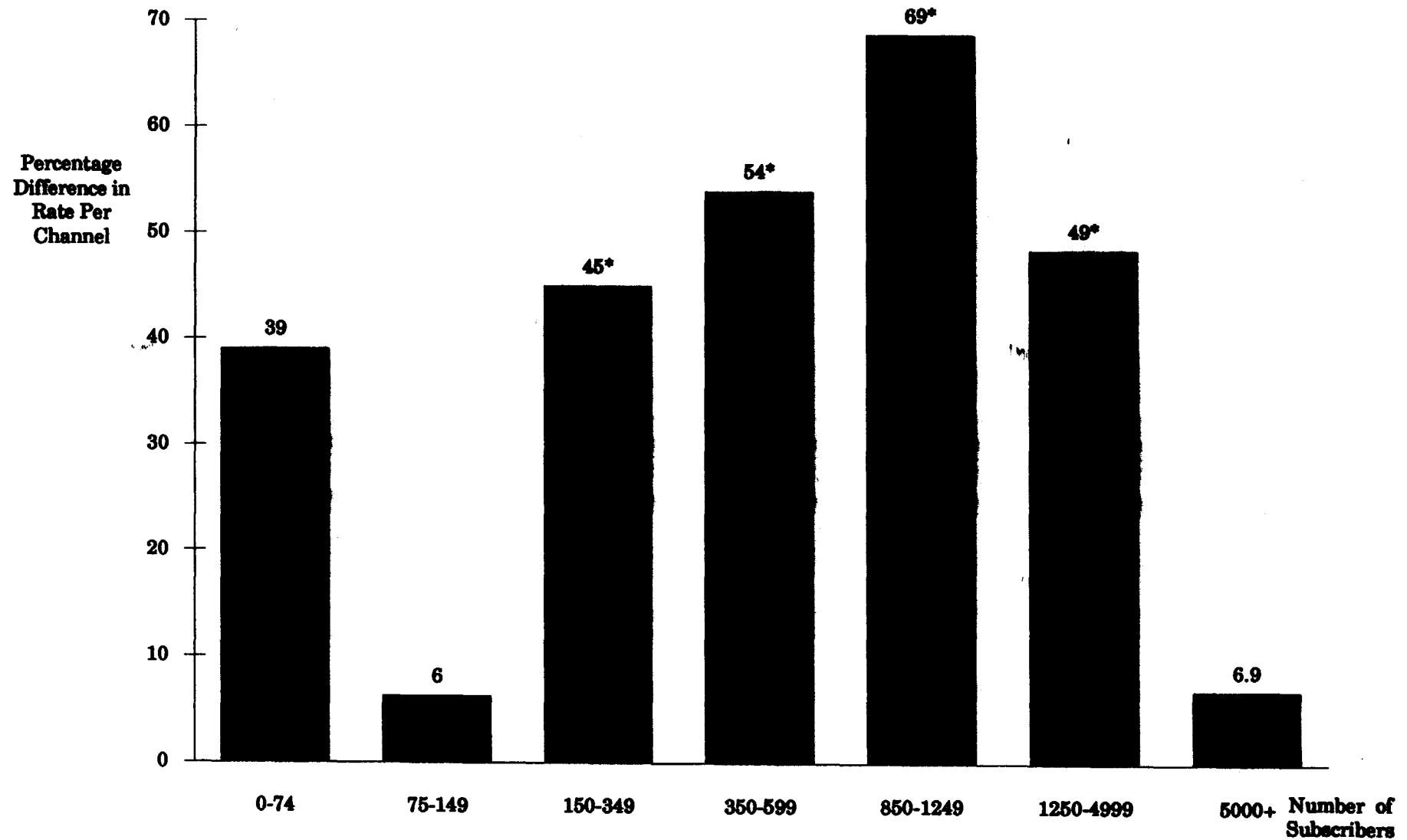


Chart 2b

Percentage Differences in Rate Per Channel Between FCC Random Sample and Overbuild Systems Based on the Number of System Subscribers



* Significantly greater than zero at 5% confidence interval.

**ECONOMIC ANALYSIS OF
MUNICIPAL OVERBUILD CABLE SYSTEM
IN PARAGOULD, ARKANSAS**

Prepared for:

**National Cable Television Association
Washington, D.C.**

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Economic Analysis of Municipal Overbuild Cable System in Paragould, Arkansas

1. Introduction

Malarkey-Taylor Associates, Inc. was retained by the National Cable Television Association (NCTA) to analyze a municipal overbuild cable system, Paragould City Cable, owned and operated by Paragould Light and Water Commission, which has been identified by the Federal Communications Commission (FCC) as subject to effective competition. Information was also obtained for the private cable system in Paragould, Paragould Cablevision, a subsidiary of Cablevision Systems Inc.

The FCC had surveyed cable television franchises and systems throughout the country, including

Underlying assumptions of the financial model used in this study are detailed below in the attached Appendix.

2. Paragould City Cable

The financial analysis indicates that Paragould City Cable is indeed losing money and that Paragould's municipally owned cable system will continue to incur significant financial losses indefinitely, as long as two competing cable systems are serving Paragould residents. Paragould City Cable will lose over \$3,000,000 from 1993 to 2001 due to charging rates for cable service that are non-compensatory -- City Cable's rates are below cost.

This section summarizes the results of pro-forma financial analysis for Paragould City Cable and reviews information related to the competing private cable system, Paragould Cablevision.

Key data and financial inputs for Paragould City Cable were as follows:

	<u>1993</u>
Miles of cable plant	145
Homes passed	8,500
Basic cable subscribers	3,579
Premium (Pay TV) units	4,255
Full basic tier rate	\$11.50
Average discounted premium rate	\$4.98
Cost per mile of aerial plant	\$13,000
Average cost per converter	\$96
Cable TV Revenues (approx.)	\$750,000
Cable TV Operating Expenses (approx.)	\$569,000
Operating Profit Margin	24%

The following results are drawn from applying Malarkey-Taylor's financial model to the above

3. Paragould Cablevision

Paragould's private cable system, owned by Cablevision Systems Inc., is also losing money. The following information provided by Paragould Cablevision reflects annual losses, after interest, depreciation and annual capital improvement expenditures:

	Net Cash Losses
1993	(\$1,285,000)
1994	(\$1,220,000)
1995	(\$1,160,000)
1996	(\$1,100,000)
1997	(\$1,045,000)
1998	(\$990,000)
1999	(\$940,000)
2000	(\$890,000)
2001	(\$845,000)
2002	(\$805,000)
Total	(\$10,280,000)

4. Conclusion

Based on data provided by Paragould City Cable and Paragould Cablevision, our financial analysis verifies substantial net cash losses incurred by both of these cable systems. The losses are due to a cable price war in Paragould where both the private cable system, Paragould Cablevision, and the municipally owned cable system, Paragould City Cable, are charging below-cost rates for cable service.

Paragould City Cable is likely to incur over \$3,000,000 of losses in the next ten years, and Paragould Cablevision is likely to incur over \$10,000,000 of losses in the next ten years.

APPENDIX A

Assumptions

(a) Capital Investment

Capital costs were based on a replacement cost calculation. The cable system's total turn-key capital investment was derived from cable construction costs (labor and materials) per plant mile which were provided by the systems, headend and converter cost estimates, and installation cost estimates. Current technology, labor rates and costs of materials were assumed.

The cost of the distribution plant was determined by applying per mile construction costs to actual aerial and underground mileage reported by the system. The cost of the remainder of the system's assets includes subscriber installations, converters, headend equipment, satellite earth stations, towers and antennas, land, buildings, office equipment, test equipment, tools, vehicles, and studio equipment. This cost was determined by sampling the results of tangible asset valuations performed by MTA for its clients. The results of this sample showed that the average cost of the tangible assets, exclusive of the distribution plant, was \$400 per subscriber. To account for the difference in investment between an addressable system, \$50 was deducted from the total capital investment for each system per non-addressable subscriber

A cable system's fair market value or acquisition cost may be a more correct and more appropriate measure of capital investment than replacement cost. We have used replacement cost rather than fair market value or acquisition cost to evaluate the profitability of these cable systems in the FCC's sample because of the dearth of acquisition cost data for cable systems subject to effective competition and because the replacement cost assumption is more conservative, since acquisition cost and fair market value will typically exceed replacement cost.

(b.) Subscriber Projections

Initial values for the number of cable television plant miles, homes passed by cable, basic subscribers and premium channel subscriptions (pay units) were obtained from FCC surveys and from the cable system.

The growth of homes in the service area were projected by applying an initial annual growth rate for homes passed of 1% for each system, which declined gradually to 0.7% by the tenth year. The density of additional plant constructed to service the additional homes passed was assumed

to remain at the beginning level for all ten years. The number of basic cable television subscribers is projected to increase by 2.0% annually over the ten year projection period. Premium subscription units are projected to increase by 1.5% annually over the next ten years.

(c.) Rate Increases

Basic cable service rates are projected to increase at 4% annually beginning in the second year of operation. Additional outlet rates, remote rental rates, and installation rates are also projected to increase 4% annually following the first year of operation. Average discounted premium channel rates are projected to increase by a nominal 1% per year over the ten year time horizon beginning in the second year; real rates for premium channels are assumed to decline.

(d.) Revenues

Revenues for each cable service category were calculated by multiplying the average number of subscribers to each service for that year by the rate applicable for that service. In addition

PARAGOULD LIGHT AND WATER COMMISSION
PARAGOULD, AR
FCC ID #AR0576 (1)

EXHIBIT A

	INITIAL INVESTMENT	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
REVENUES	0	\$753,563	788,994	827,740	868,611	911,728	957,223	1,005,234	1,055,908	1,109,401	1,165,876
OPERATING EXPENSES	0	568,590	594,177	620,914	648,856	678,054	708,567	740,452	773,772	808,592	844,979
OPERATING INCOME	0	184,973	194,817	206,826	219,755	233,674	248,656	264,782	282,136	300,809	320,897
PLUS: RESIDUAL VALUE											1,925,384
LESS: CAPITAL EXPENDITURES	3,358,937	35,407	36,321	38,159	54,295	56,750	59,320	62,011	64,829	67,780	70,871
TOTAL CASH FLOW/REQUIREMENTS	(3,358,937)	149,566	158,496	168,667	165,460	176,924	189,336	202,771	217,307	233,028	2,175,411
INTEREST		\$251,920	\$251,920	\$251,920	\$251,920	\$251,920	\$251,920	\$251,920	\$251,920	\$251,920	\$251,920
DEPRECIATION		\$268,558	\$268,558	\$268,558	\$268,558	\$268,558	\$268,558	\$268,558	\$268,558	\$268,558	\$268,558
NET CASH FLOW (LOSS)	(\$3,358,937)	(\$370,912)	(\$361,982)	(\$351,811)	(\$355,018)	(\$343,554)	(\$331,142)	(\$317,707)	(\$303,171)	(\$287,450)	\$1,654,933
CUMULATIVE NET CASH FLOW (LOSS)		(\$370,912)	(\$732,894)	(\$1,084,706)	(\$1,439,724)	(\$1,783,278)	(\$2,114,420)	(\$2,432,127)	(\$2,735,299)	(\$3,022,749)	(\$1,367,816)

EXHIBIT B

[illegible]

CURRENT RATES

BASIC	\$11.50
PREMIUM	4.98
ADDITIONAL OUTLETS	0.00
REMOTE CONVERTERS	0.00

[illegible]

AVERAGE RATES

[illegible]

PARAGOULD LIGHT AND WATER COMMISSION
PARAGOULD, AR
FCC ID #AR0576 (1)

EXHIBIT D

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	TOTAL
REVENUES:											
BASIC	\$499,284	\$530,246	\$562,485	\$596,684	\$632,963	\$671,447	\$712,271	\$755,577	\$801,516	\$850,248	\$6,612,720
PREMIUM	254,279	258,748	265,255	271,926	278,765	285,776	292,964	300,332	307,885	315,628	\$2,831,558
ADDITIONAL SETS	0	0	0	0	0	0	0	0	0	0	0
REMOTE CONVERTERS	0	0	0	0	0	0	0	0	0	0	0
TOTAL REVENUES	\$753,563	\$788,994	\$827,740	\$868,611	\$911,728	\$957,223	\$1,005,234	\$1,055,908	\$1,109,401	\$1,165,876	\$9,444,278
OPERATING MARGIN:	24.5%	24.7%	25.0%	25.3%	25.6%	26.0%	26.3%	26.7%	27.1%	27.5%	
OPERATING EXPENSES:	\$568,590	\$594,177	\$620,914	\$648,856	\$678,054	\$708,567	\$740,452	\$773,772	\$808,592	\$844,979	\$6,986,953
OPERATING INCOME:	\$184,973	\$194,817	\$206,826	\$219,755	\$233,674	\$248,656	\$264,782	\$282,136	\$300,809	\$320,897	\$2,457,325

CAPITAL EXPENDITURES	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	TOTAL

ASSUMPTIONS AND INPUTS:											

ADD'L MILES OF PLANT	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
AERIAL PLANT PER MILE	\$13,000	\$13,390	\$13,792	\$14,205	\$14,632	\$15,071	\$15,523	\$15,988	\$16,468	\$16,962	
UNDERGROUND PLANT PER MILE	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510	\$23,185	\$23,881	\$24,597	\$25,335	\$26,095	
PERCENTAGE OF PLANT AERIAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
PERCENTAGE OF PLANT UNDERGROUND	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
AVERAGE COST PER CONVERTER	\$96	\$99	\$102	\$105	\$108	\$111	\$115	\$118	\$122	\$125	
PERCENTAGE CONVERTER USE	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	
PERCENTAGE REPLACEMENT	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	
INSTALLATION COST PER SUB	\$50	\$52	\$53	\$55	\$56	\$58	\$60	\$61	\$63	\$65	
INFLATION FACTOR RE CAPITALS	0%	3%	3%	3%	3%	3%	3%	3%	3%	3%	
ANNUAL COSTS:											

PLANT ADDITIONS - AERIAL	\$0	\$0	\$0	\$14,205	\$14,632	\$15,071	\$15,523	\$15,988	\$16,468	\$16,962	\$108,849

Small Cable TV System
Local office, open normal hrs.

This entails renting and staffing an office, managing and routinely training the office person, staffing vacations, sick days, etc.

- Office rent, utilities, etc. \$250/mo.
- One full time person at \$7.50/hr X 1.33 OH, or \$1,730/mo.
- Manager time, 5 hours/week at \$20/hr., or \$430/mo.
- Training and support, est at 20% of labor plus OH cost, or \$345/mo.

Mo. Op. Cost	Total	\$2,750/mo.
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<u>System Size</u>	<u>Added Cost/Cust/Mo.</u>
100 cust.	\$27.50
250	11.00
500	5.50
750	3.67
1,000	2.75
1,500	1.83